

## **Ongoing Research Studies at the Bressler Program**

### **An Open-Label Treatment Trial to Assess the Short-Term Tolerability, Safety, and Efficacy of Methylphenidate Hydrochloride Extended-Release Liquid Formulation in High-Functioning Autism Spectrum Disorder Adults with Attention-Deficit/Hyperactivity Disorder**

The purpose of this 6-week study is to assess the use of an FDA-approved extended-release liquid formulation (Quillivant XR-methylphenidate hydrochloride) for the treatment of Attention-deficit/Hyperactivity Disorder (ADHD) in adults with high-functioning Autism Spectrum Disorder (ASD). Quillivant XR offers a gradual mode of delivery that may offer improved tolerability. ADHD is the most common psychiatric disorder recognized in youth and adults with ASD. We plan to enroll up to 40 subjects of both genders, ages 18-25 with intact intellectual functions. You can find more information on ClinicalTrials.gov:

<https://clinicaltrials.gov/ct2/show/NCT02096952>.

### **An Open-Label Trial of Oxytocin in Adolescents with Autism Spectrum Disorders**

This 8-week study aims to evaluate the effects of long-term Oxytocin administration on social impairment in adolescents with ASD, a central feature of this disorder. Oxytocin is a naturally occurring hormone that has been reported to play a powerful role in social behaviors in both humans and other mammals. Participants include children or adolescents ages 11-17 with a DSM-IV diagnosis of autism, Asperger's disorder or Pervasive Developmental Disorder-not otherwise specified (PDD-NOS). You can find more information on ClinicalTrials.gov:

<https://clinicaltrials.gov/ct2/show/NCT01931033>.

### **Behavioral and Neural Response to Memantine in Youth with Autism Spectrum Disorder**

This 12-week study seeks to evaluate the safety and efficacy of Namenda (memantine) for the treatment of core features of ASD in children and adolescents. Deficits in social interaction are the central feature of ASD and often result in significant impairment for individuals with High Functioning-ASD. Available data from past treatment studies of Namenda demonstrates improvements in a range of impairments including attentional and social skills in individuals with ASD. Eligible subjects, children ages 8-17 with a DSM-V diagnosis of ASD, will be enrolled to receive either placebo or Namenda. Subjects also complete a pre- and post-treatment brain scan before and after treatment with Namenda. You can find more information on ClinicalTrials.gov:

<https://clinicaltrials.gov/ct2/show/NCT01972074>.

## **An open-label trial of buspirone for the treatment of anxiety in youth with autism spectrum disorders**

This 8-week study seeks to evaluate the safety and efficacy of Buspar (buspirone) for the treatment of significant anxiety in children and adolescents with ASD. Buspar is an approved medication for the treatment of anxiety symptoms, which are often present in children with ASD. Participants are children or adolescents ages 6-17 with a diagnosis of autism, Asperger's disorder or PDD-NOS, and significant features of anxiety. You can find more information on ClinicalTrials.gov: <https://clinicaltrials.gov/ct2/show/NCT01850355>.

## **Examining the neural correlates of ADHD in adolescents with Autism: A preliminary fMRI study**

This is an fMRI study in collaboration with Dr. John Gabrieli at MIT. This study with examines the brains of children with ADHD, as well as children with ASD+ADHD and children with neither. The major goal of this study is to use cognitive neuroscience methods to discover whether ADHD-like difficulties in ASD are associated either with the same or different brain characteristics. Eligible male participants, ages 8-17, are divided by diagnostic groups: comorbid ASD+ADHD, ADHD only, and healthy controls.

## **Emotional Dysregulation and Autism Spectrum Disorder: A Preliminary Spectroscopic Neuroimaging Study**

The goal of this study is to use cognitive neuroscience methods to examine whether emotional dysregulation (ED) in ASD presents in the brain similarly to or differently from typical ED. Emotional dysregulation (ED) is characterized by poor self-regulation that includes symptoms of low frustration tolerance, impatience, quickness to anger, and marked emotional reactivity. Eligible children ages 8-17 are divided into four groups based on the presence of ED and ASD: ASD with ED, ASD without ED, ED without ASD, and healthy controls.